

# CONSOLE MANAGEMENT CONTROLLER

## Installation Card For Door Lock Kit

### Read Instructions Completely Before Beginning Installation Procedures



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Compaq Console Management Controller Door Lock Kit Installation Instructions

Second Edition (December 2001)  
Part Number 240828-022



240828-022

## About This Device

This document provides instructions to assist qualified personnel with the installation of the Compaq Console Management Controller (CMC) Door Lock Kit.

This door lock kit includes the following features:

- Installs in the 9000 and 10000 series of Compaq racks.
- Mounts in a 0U configuration.
- Provides front and rear door locking control for a single rack.

## Regulatory Compliance Information

This CMC Door Lock Kit is listed and certified for use only with the Compaq Console Management Controller Units. This device is not intended for use with nor suitable for connection to facility burglary protection, security, or surveillance systems.

Regulatory certification for this product was obtained under agency series number EO3009L. The corresponding part number is 203039-B23.

## Read Before Installing Product

Read the *Important Safety Information* guide (included with this kit) before installing this product.



**WARNING:** There is a risk of personal injury from electrical shock and hazardous energy levels. The installation of options and routine maintenance and service of this product must be performed by individuals who are knowledgeable about the procedures, precautions, and hazards associated with AC power products.

Follow the instructions in this document during installation of the door lock kit.

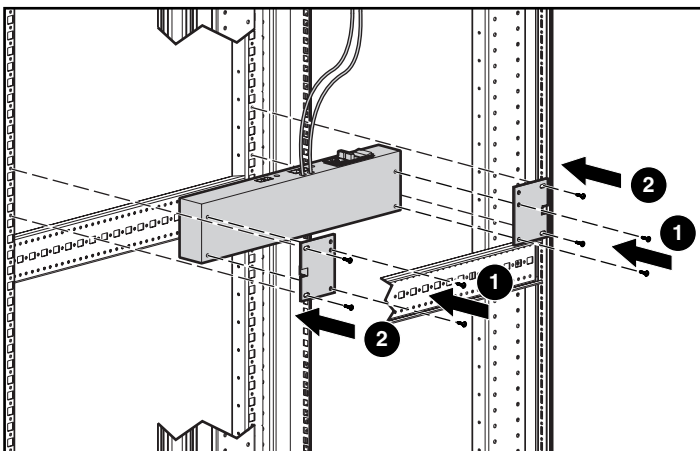
## Kit Contents

- Door lock control unit
  - Mounting brackets (257661-001)
- Country-specific power cord
- Front rack door
  - Lock assembly
    - 91XX, 9842, and 106XX (257662-001)
  - Latch assembly
    - 91XX and 106XX (257662-002)
    - 9842 (257662-003)
- Rear rack door
  - Lock assembly
    - 91XX, 9842, and 106XX (257663-001)
  - Latch assembly
    - 91XX and 9842 (257663-002)
    - 106XX (257663-003)
  - Brackets
    - Standard rack (257664-001)
    - Standard rack with extension kit (257664-002)
- Tie wraps
- Cables
  - Concealed Door Release cable assembly (257658-001)
  - CMC lock command cable (231915-001)
  - I<sup>2</sup>C communication cable (231526-002)
- Software
  - Compaq Intelligent Rack Manager Lite CD
  - Power Products Documentation CD
- Mounting hardware
  - Screws
  - Cage nuts



## 1 Installing the Door Lock Control Unit

Position the control unit between a front and rear rail. Attach the brackets to the door lock control unit, using the M3 screws ①. Attach the brackets to the rails using self-tapping screws ②. The control unit can face up or down depending on specific installation requirements.

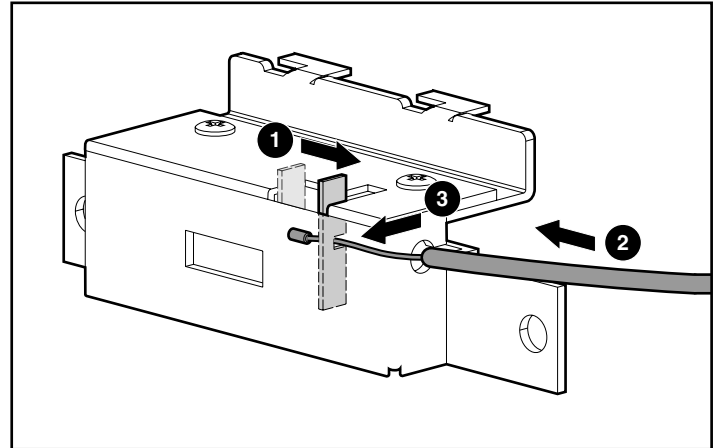


## 2 Connecting the Actuator Cable to the Lock Mechanism

The actuator cables are attached to the door lock control unit. Use the short cable to connect to the front lock mechanism and the longer cable to connect to the rear lock mechanism.

To connect to the front lock mechanism, feed the actuator cable ② through the gap between the rack rail and frame. Slide the lever ① and place the actuator cable ② into the opening, making sure to secure the end of the cable ③ over the slot.

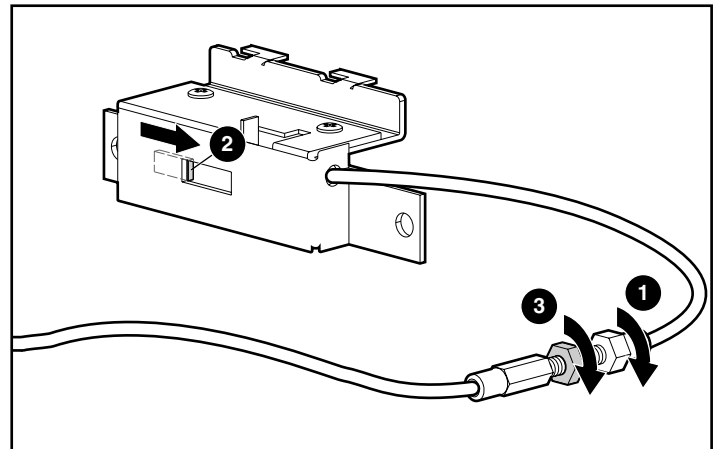
Repeat procedure to connect to the rear lock mechanism.



**CAUTION:** The actuator cable should be installed with a bend radius of at least 100 mm to avoid kinking the cable. Do not bend or squeeze the actuator cable.

## 3 Adjusting the Lock Mechanism

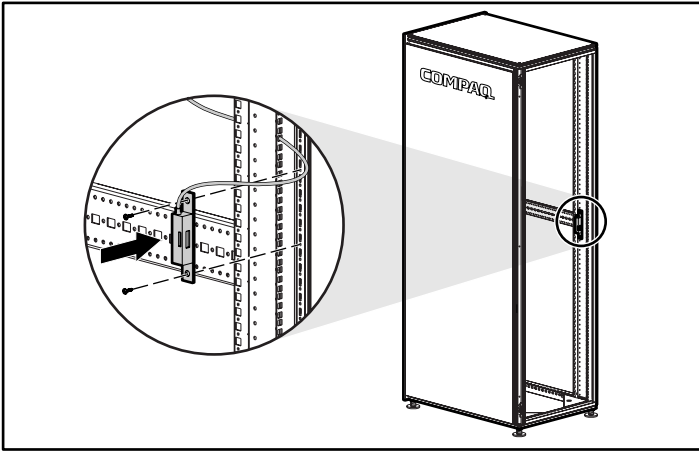
Turn the adjusting connector ① until the edge of the latch ② on the lock mechanism moves above the edge of the opening. Secure with the locknut ③.



*Continued on reverse*

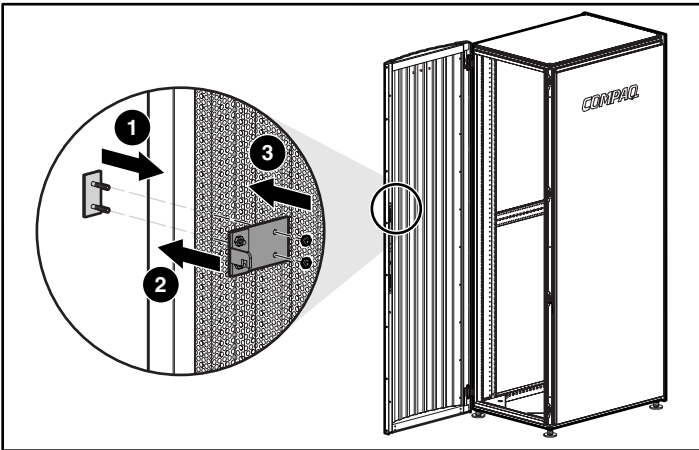
## 4 Installing the Front Door Lock Mechanism

Connect the front door lock assembly to the side of the front frame.



## 5 Installing the Front Door Lock Latch

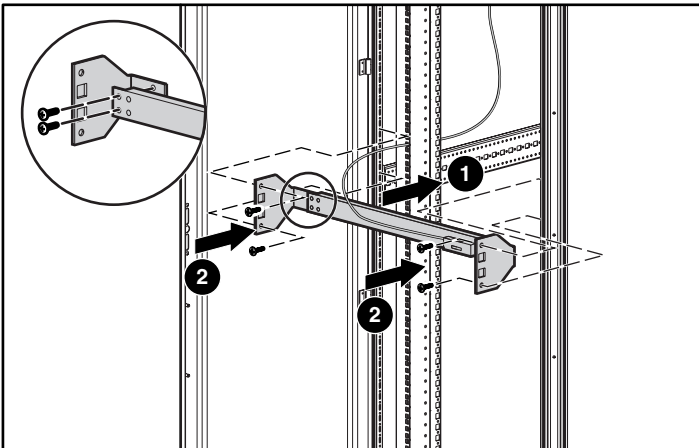
Align the latch with the lock mechanism. Insert the screws with the backing plate ① through the holes in the front door of the rack. On the inside of the door, place the front door lock latch ② over the screws and secure with the hardware provided with this assembly ③. For 91XX and 106XX series racks, use latch assembly 257662-002. For the 9842 series rack, use latch assembly 257662-003.



## 6 Installing the Rear Door Lock Mechanism

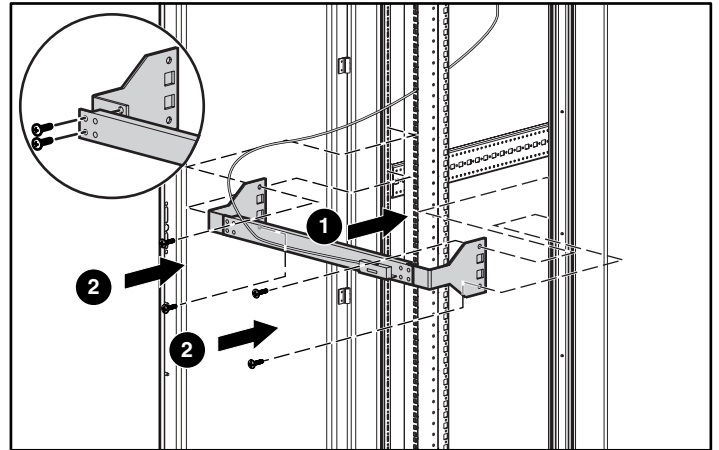
### 91XX Series Rack

Align the standard brackets (257664-001) on the rear door lock assembly and secure with the screws. Position the rear door lock assembly as shown. Insert the self-tapping screws ② to secure the rear door lock mechanism ① to the rack.



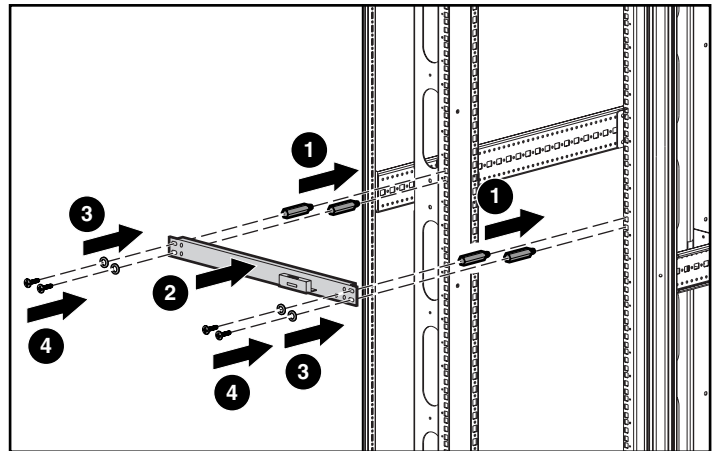
### 91XX Series Rack with Extension Kit

Align the extension brackets (257664-002) on the rear door lock mechanism and secure with the screws. Position the rear door lock assembly as shown, so that the assembly extends towards the rear door. Insert the self-tapping plate screws ② to secure the rear door lock mechanism ① to the rack.



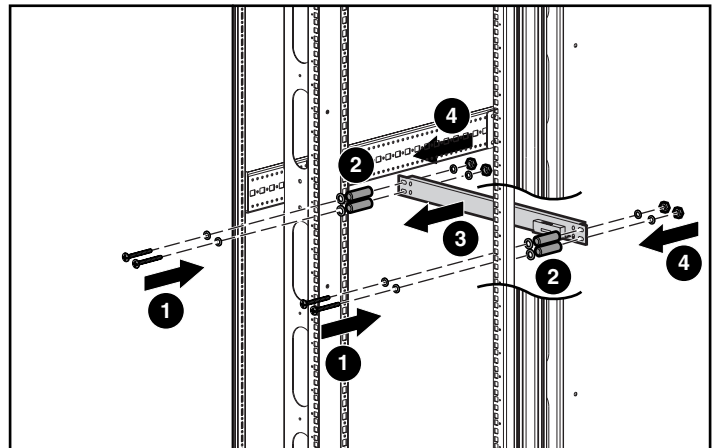
### 9842 Series Rack

Attach long spacers ① to the rear rails using the cage nuts. Insert screws ④ and washers ③ to secure the door lock assembly ② to the long spacers ①.



### 9842 Series Rack - Front and Rear Doors Reversed

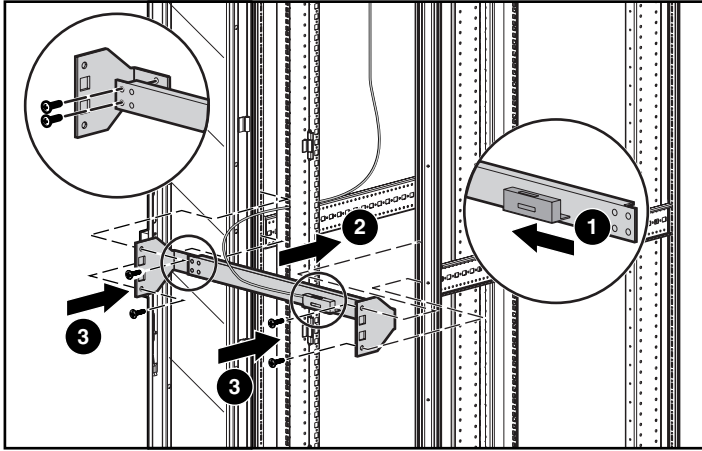
Insert the screws ① to secure the short spacers ② and the rear door lock assembly ③ to the front rails as shown, using screws, washers and nuts ④.



## 10000 Series Rack

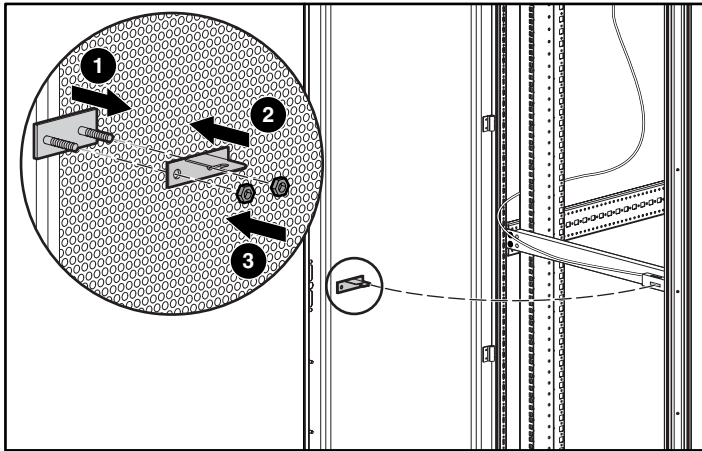
To accommodate the double doors of a 106XX rack, unbolt the locking mechanism from the crossbar and reposition in the left hole pair as shown **1**. (For the 9000 series rack, use the right hole pair.)

Align the standard brackets (257664-001) on the rear door lock assembly and secure with the screws. Position the rear door lock assembly as shown. Insert the self-tapping screws **3** to secure the rear door lock mechanism **2** to the rack.



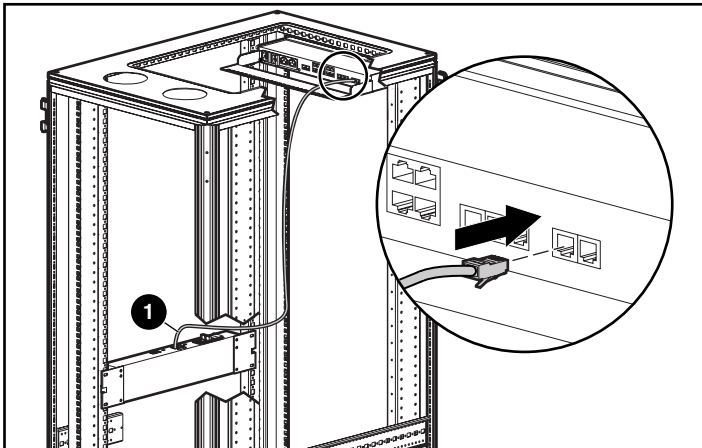
## 7 Installing the Rear Door Lock Latch

Align the latch with the lock mechanism. For 91XX and 9842 series racks, use latch assembly (257663-002). For 106XX series racks, use latch assembly 257663-003. Insert the screws with the backing plate **1** through the holes in the rear door of the rack. On the inside of the door, place the rear door lock latch **2** over the screws, securing with the hardware provided in this assembly **3**.

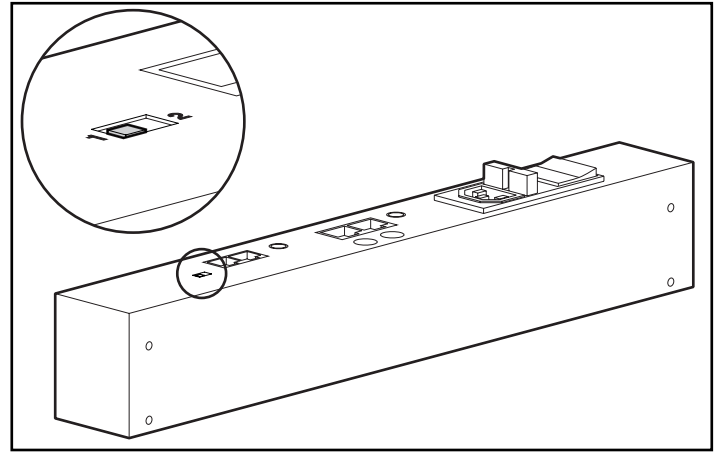


## 8 Connecting to the CMC

Power off the CMC, then connect the I<sup>2</sup>C cable from the CMC to one of the I<sup>2</sup>C ports on the door lock control unit **1**. Connect the cable from the CMC lock port 1 or 2, to the lock port on the door lock control unit. The cables can be routed through the rack and then attached by using tie wraps.

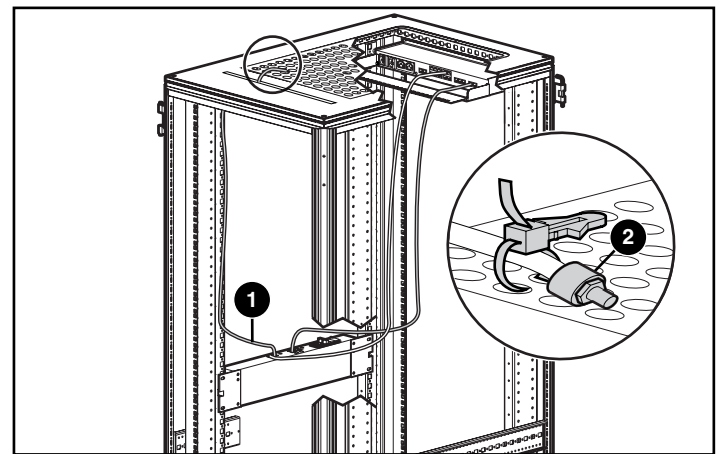


Set the address switch to 1 or 2 on the door lock control unit to match the lock port that is connected to the CMC.



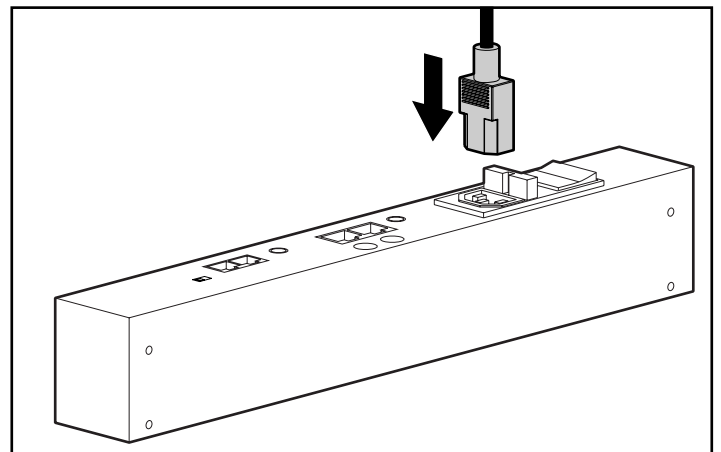
## 9 Connecting the Concealed Door Release Cable

The concealed door release button **2** is designed to release the door locks manually if this feature is activated in the Compaq Intelligent Rack Manager Lite software. Connect the concealed door release cable assembly **1** to the door lock control unit unlock port. Route the cable through the rack and locate the push button **2** in a concealed location. (This is a suggested location.)



## 10 Connecting the Power Cord

Connect the country-specific power cord to the socket on the door lock control unit.

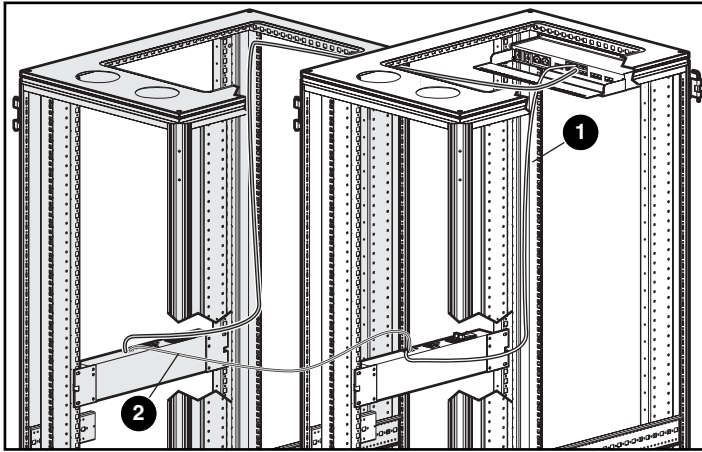


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## 11 Connecting to an Additional Rack

A single CMC can support up to two door lock kits. Repeat steps 1 through 7 to complete installation of the door lock equipment for the second rack. Connect the second I<sup>2</sup>C cable ② between the two door lock control units. Connect the cable from the lock port to the open CMC lock port ①. Set the switch on the door lock control unit to match the lock port used on the CMC. Connect the second concealed door release cable and the AC power cable as detailed in steps 9 and 10.



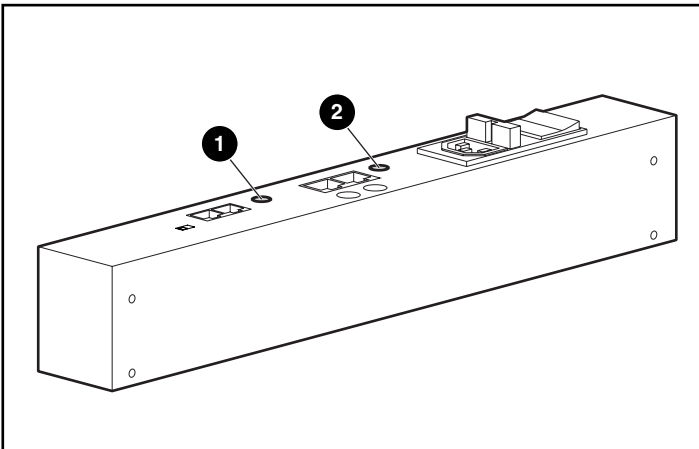
For translated documents, refer to the PPD CD included with the option kit.

**Hardware installation is complete.**

### LED Configuration

The door lock control unit has the following LEDs.

- ① Power LED
  - Green - On
- ② I<sup>2</sup>C Communication LED/Status LED
  - Green flashing - Communication Traffic
  - Red flashing - System Error or Battery Charging



## 12 Configuring the Software

Configure the door lock control unit using the Compaq Intelligent Rack Manager Lite software (see the *Compaq Console Management Controller User Guide*). One CMC is able to support up to two door lock kits.

### DOORS AND SENSORS:

For each door lock kit, select the doors that must be closed before the lock should activate. Intrusion sensors must monitor these selected doors. From the Accessory Setup screen of the Compaq Intelligent Rack Manager Lite software, select at least one door for each lock kit.

Each door lock control unit locks and unlocks, as a pair, the front door and the rear door of a single rack. For a secure rack, the system should verify that the front and rear doors are closed before the lock activates. The intrusion sensors indicate to the system that the doors are closed and are ready to be locked.

### PRESETS:

From the **Accessory Setup** screen, preset the lock response to four fault conditions:

- Power Failure
- Low Battery
- Network Failure
- Communication Failure

If any of these faults occur, the door lock control unit responds by keeping the doors locked, or by immediately unlocking the doors, or by enabling the **Concealed Door Release** button, as selected in the software.

### SETUP EXAMPLE:

Power Failure	No
Low Battery	Yes
Network Failure	Enable Concealed Door Release
Communication Failure	Enable Concealed Door Release

The rack remains locked if the door lock control unit loses AC power. The door lock control unit continues to operate using the backup battery power.

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**NOTE:** If the CMC also loses AC power, you will not be able to change any settings.

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If the AC power is not restored within approximately six hours, the Low Battery alert is triggered and the doors unlock. This alert ensures that sufficient battery power is reserved to unlock the doors. After 30 minutes, the door lock control unit stops functioning. When the AC power is restored, the door lock control unit automatically relocks all the doors and begins recharging the batteries.

If the CMC detects a network failure, the doors can be opened by pressing the **Concealed Door Release** button. The CMC determines a Network Failure has occurred if the CMC fails to communicate with the Compaq Intelligent Rack Manager Lite software for approximately four minutes.

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**NOTE:** If you are using management software other than Compaq Intelligent Rack Manager Lite, ensure that the **Network Failure** condition is selected as **No**. If the Compaq Intelligent Rack Manager Lite service is not running on the management console, the CMC detects a Network Failure and responds accordingly.

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If the CMC loses communication with the door lock control unit, a communication failure will be triggered. The doors can then be opened by pressing the **Concealed Door Release** button.

## Maintenance

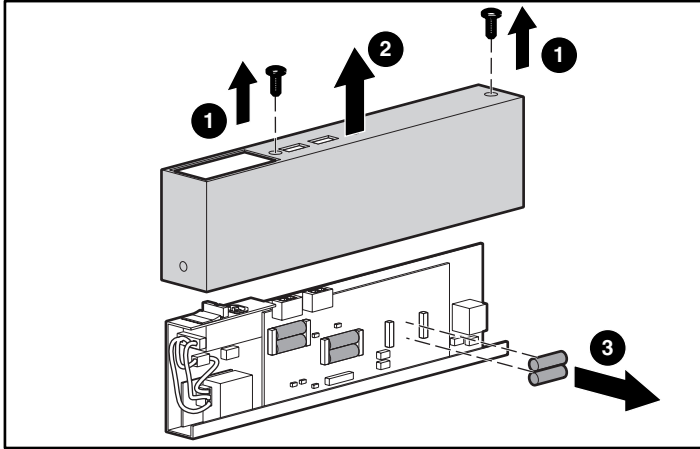


**WARNING:** To reduce the risk of injury from electric shock, remove the power cord before servicing.

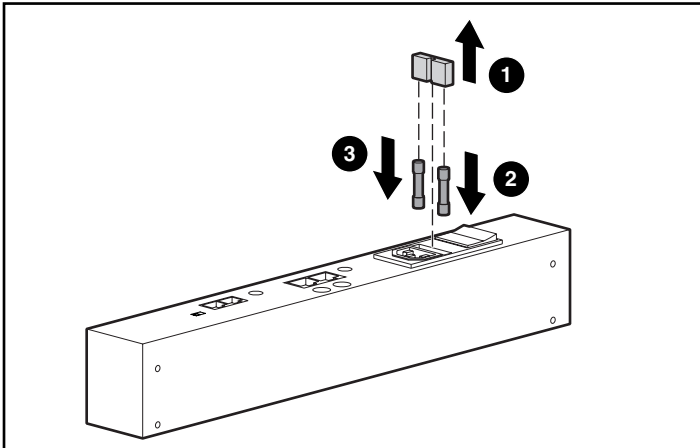
When the CMC indicates that the batteries in the door lock control unit require changing, remove the screws **1**, lift the cover **2** off, and replace the six batteries with the same type and capacity (NiMH, size AA, 1100mAh) **3**.



**CAUTION:** There is a risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries properly.



If the fuse **2** has opened, be sure that the condition that caused the fault has been cleared. Remove the fuse cover **1**. Replace the fuse **2** with the exact rating as specified on the unit label. The second fuse **3** is a spare. Contact your Compaq authorized service representative for more details.



Repairs to the CMC door lock control unit and lock mechanism must be carried out by Compaq or a Compaq authorized service representative.